

Attendees

- WBGU
 - None (Day off)
- WGTE
 - None
- WOSU
 - Michael Meadows
 - Tim Kelly
- OGT
 - None
- WPTD
 - Travis Fultz
 - Joshua Beyersdoerfer
- WCET
 - None
- WOUB
 - Jonathan Palmer
 - Terry Douds
- WVIZ
 - Daniel Black
 - Chuck Poulton
- WNEO
 - None
- BEMC
 - Eric Wortman
 - Geoffrey Philips
 - Shawn Workman
 - John Domigan
 - Craig Stevenson
 - Josh Sorden

Topics

Network

- Last mile circuits
 - Work on last mile connectivity at Cincinnati and Cleveland continues.
 - ◆ Both circuits in Cincinnati have completed through the conduit phase, but the fiber is on backorder.
 - ◆ Cleveland has entered the provisioning phase and is expected to become available to BEMC and OARnet for our part of the build

on June 29th. Once we have access, connections will be made and configurations built. After that, we will be doing testing before a rollover would occur.

- Last mile circuit rebuilt and tested successfully for CET to address CBTS issues.
- Assisting with WNEO and OARnet on a redundant last mile circuit via wireless link as a pilot project. Will involve testing by all parties, especially for latency.
- Network infrastructure overhaul project is progressing.
 - The new routing platform has been installed at BEMC for testing. This testing replicates the hardware and links we would have in place for an affiliate site, including the switches that would be onsite, a last mile connection, and the routing used in a PoP.

Storage

- Spinning disk storage.
 - An additional 1.9 PB is scheduled to be installed on June 14th and was originally reported to be by the end of summer 2022.
- Tape-based storage
 - Upgrading from LTO-7 to LTO-8 to gain storage capacity and maintain backwards compatibility with existing media.
 - Hardware has arrived on-site for replacing the existing cache server with newer hardware and increase the cache capacity by 7.5x.

Backup Operations Center

- A recap from the last meeting, the Backup Operations Center will serve the following purposes:
 - To allow better spacing between Media Managers and Master Control.
 - Serving in a hardware redundancy role for our main Master Control.
 - Easier testing of new releases and hardware for Engineering and Operations.
- Current status
 - Parts are being repurposed, ordered, and delivered.
 - The main console is being milled and built presently. Expecting installation during July.
 - The room most recently housed the Video NOC and previously served as radio operations for BEMC for many years. Prior to BEMC being located in the building, it served as a studio control room for WOSU before their move to the Fawcett center.
 - ◆ The space is physically separate from the existing Operations and Engineering spaces with its own door, a raised floor, and built out power feeds.

Miscellaneous Topics

- Cinegy software platform
 - In early planning for the next round of upgrades.
 - No current ETA due to the need for testing of any potential upgrades and other projects going on.
- sIX Phase E Alpha with WBGU to deliver realtime feeds to YouTube TV and PBS Digital.
 - Working towards stream validation and handoff to PBS Digital for WBGU.
 - Preliminary validation complete and in the queue for full validation. Awaiting an unrelated sIX issue (alarming) to be resolved before validation resumes for all stations.
 - We have been the test subject for going all IP with sIX working through documentation, testing, and specifications with WBGU, PBS, Edisen, Ateame, HA Design, and Cinegy.
- Life-cycle replacement and upgrade for one of our Telestream Lightspeed servers powering our Vantage transcoding platform is in progress.
- New building fire and security system in progress with an eye towards FY23-24.
- Updating satellite receivers to replace existing units that have been in continuous service for 10+ years, while also saving space and power.
- Ohio's Joint Master Control review by the Commission's Engineering & Broadcast Operations Committee

Upcoming Meetings

- September 28th, 2022 at 13:00
- January 4th, 2023 at 13:00
- April 12th, 2023 at 13:00

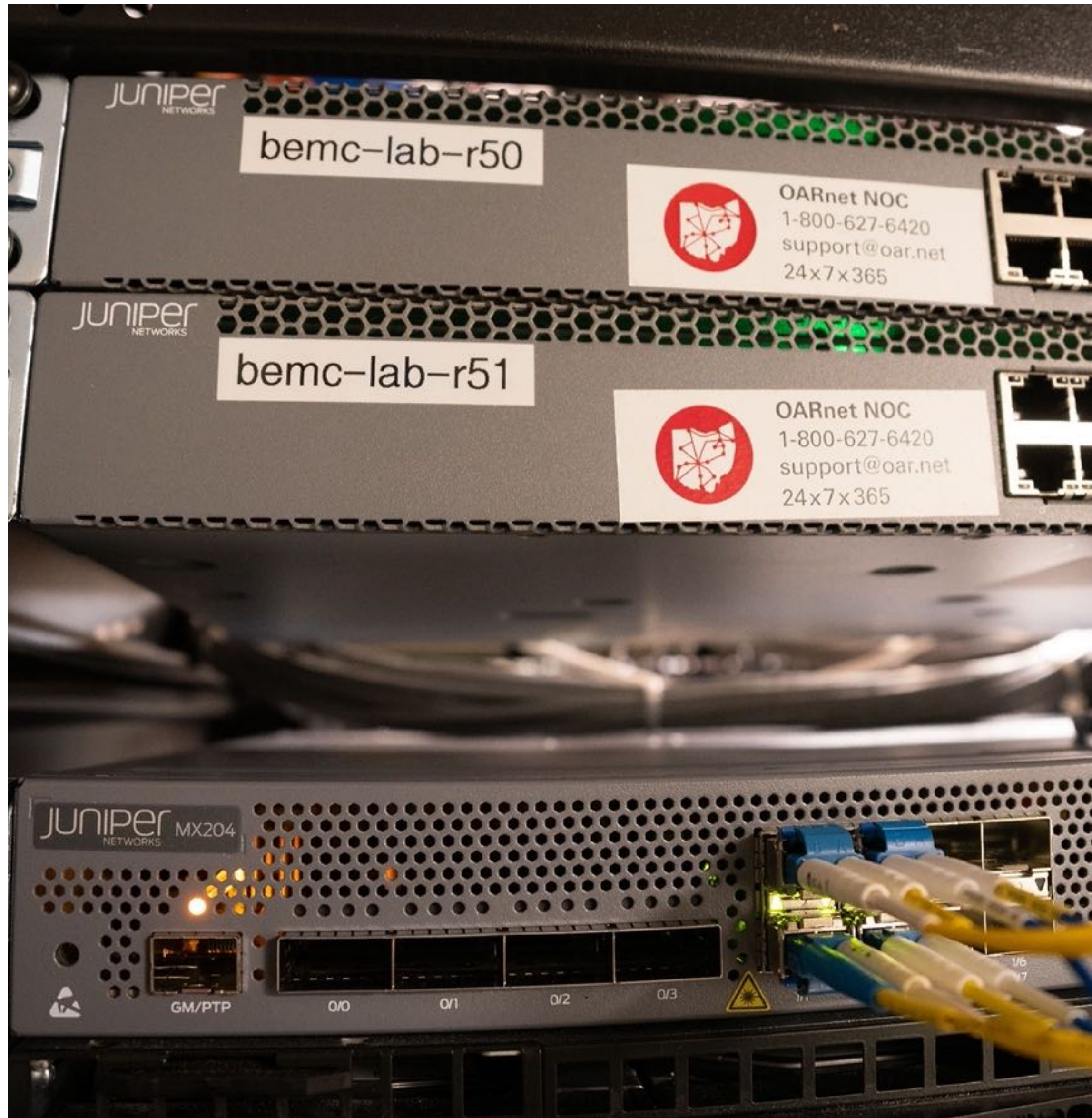
Discussion Topics

- WBGU
 - No one present.
- WGTE
 - No one present.
- WOSU
 - No questions.
- OGT
 - No one present.
- WPTD
 - No questions, but they continue to settle in.
- WCET
- WOUB
 - No questions.

- WVIZ
 - Daniel mentioned Lumen has a loopback in place and doing a quality test before handoff. BEMC meets with both Lumen and OARnet tomorrow separately and this will be a topic of conversation.
- WNEO
 - No One Present.
- BEMC
 - Craig mentioned the PBS satellite migration to a new provider. Currently that process is in RFP, with the deadline to submit being today June 8th. Vendor selection is expected to be on June 30, 2022. For BEMC's part, our dishes are agile and we will be able to offer a relatively smooth rollover with the equipment we have.
 - Geof touched on the WOSU move from Fawcett to Pearl.

Engineering Meeting

June 2022



Network Updates

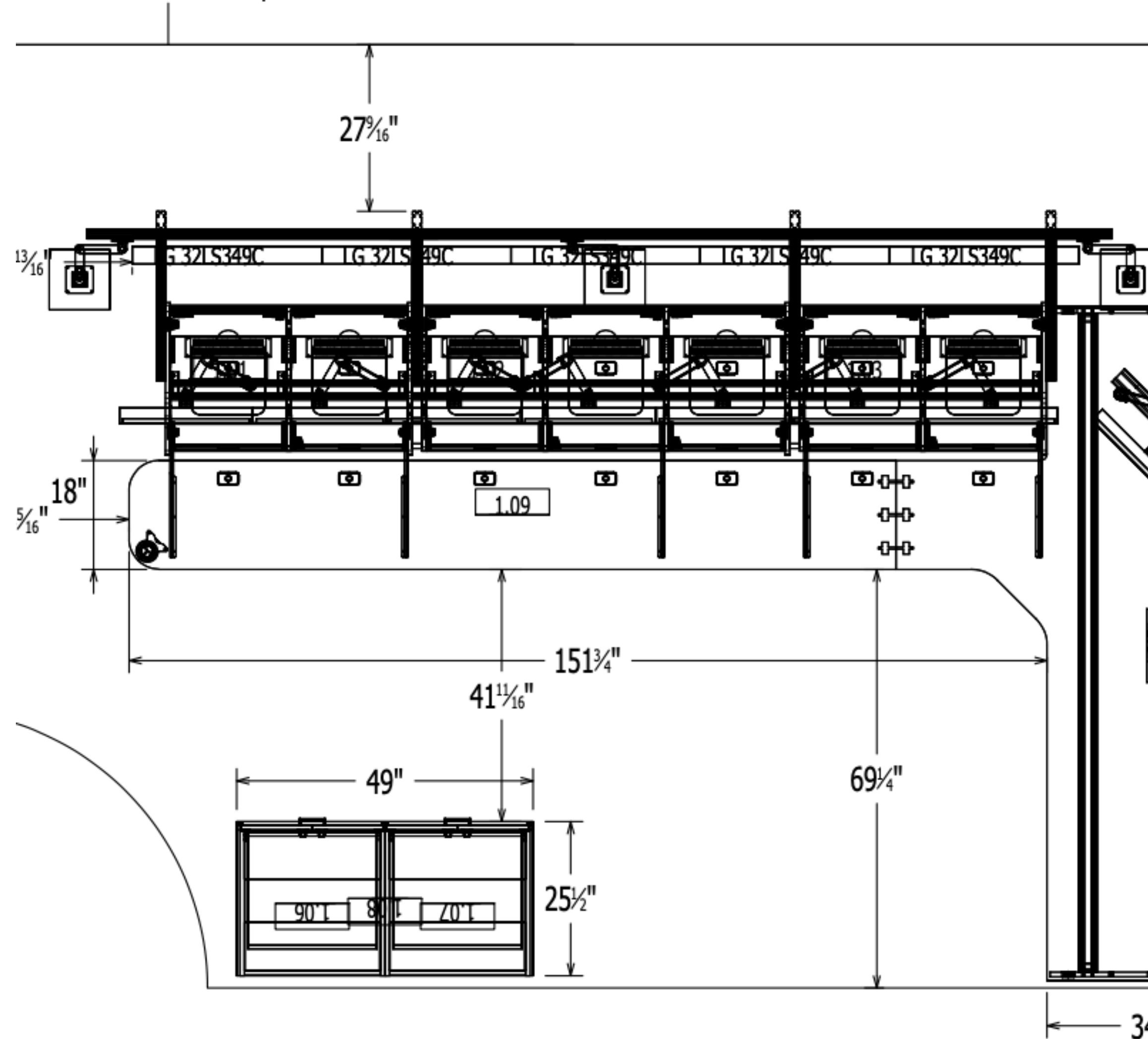
- Last Mile Circuits
 - In progress circuits with Cincinnati (2) and Cleveland (1).
 - Pilot project for a wireless circuit in Kent with WNEO to provide redundancy to existing fiber.
- Network infrastructure updates.
 - Build out and testing of a complete affiliate network site to simulate 2 last mile circuits, a PoP, and the related switches.
 - New Juniper MX204 routing platform for every site.



Storage Updates

- Disk-based storage
 - Storage increase of 1.9 PB scheduled for a June 14th install.
- Tape-based storage
 - Upgrade half of the drives from LTO-7 to LTO-8 is being scheduled.
 - Increased storage of 50% per tape.
 - Updated cache server has arrived and is awaiting installation.

Sunset Maple melamine
Graphite Nebula laminate



- Console and cabinets currently being built here in Ohio.
- New and re-purposed equipment is being gathered and ordered.
- Existing space has been cleaned out and is being prepped for installation.
- Room has served several roles during the last 70 years.
 - Video NOC and radio operations for BEMC.
 - Studio control room for WOSU.



In-Progress Projects

- Lifecycle replacement of our original Telestream G6 Lightspeed server for Vantage transcoding.
- PBS sIX Phase E Alpha
 - All IP signal workflow end to end.
 - Preliminary validation complete and in the queue for full validation.



Miscellaneous Updates

- Cinegy updates in very early discussion/planning.
- Ohio's Joint Master Control review by the Commission's Engineering & Broadcast Operations Committee
- Affiliate topics

Engineering Meetings

2022 and Beyond

Resuming an approximately quarterly schedule with some adjustments for summer vacations and holidays.

September 28th, 2022 at 13:00

January 4th, 2023 at 13:00

April 12th, 2023 at 13:00